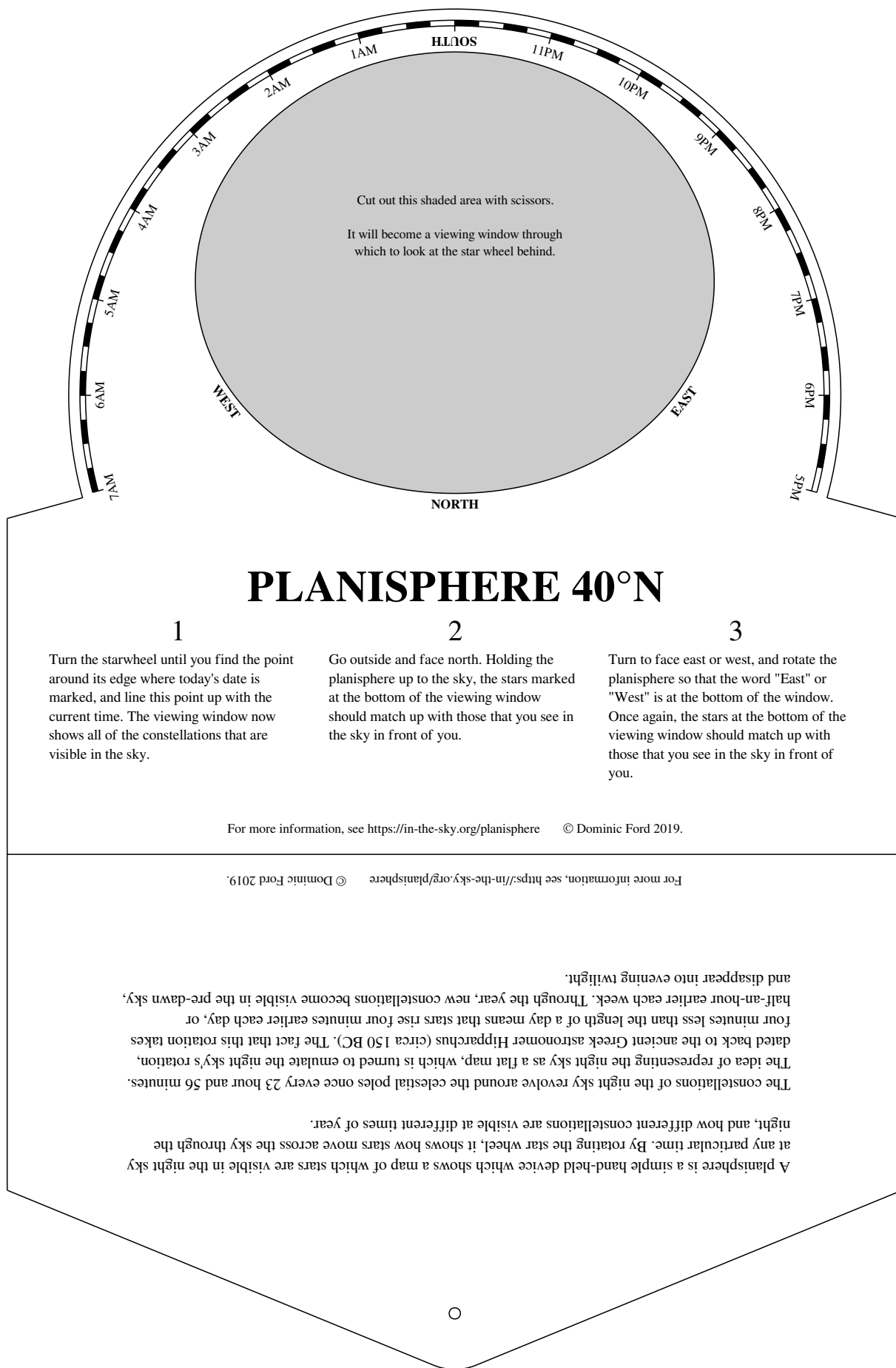


The planisphere's central star wheel, which should be sandwiched inside the folded holder.



Cut out this shaded area with scissors.

It will become a viewing window through which to look at the star wheel behind.

## PLANISPHERE 40°N

1

Turn the starwheel until you find the point around its edge where today's date is marked, and line this point up with the current time. The viewing window now shows all of the constellations that are visible in the sky.

2

Go outside and face north. Holding the planisphere up to the sky, the stars marked at the bottom of the viewing window should match up with those that you see in the sky in front of you.

3

Turn to face east or west, and rotate the planisphere so that the word "East" or "West" is at the bottom of the window. Once again, the stars at the bottom of the viewing window should match up with those that you see in the sky in front of you.

For more information, see <https://in-the-sky.org/planisphere> © Dominic Ford 2019.

For more information, see <https://in-the-sky.org/planisphere> © Dominic Ford 2019.

A planisphere is a simple hand-held device which shows a map of which stars are visible in the night sky at any particular time. By rotating the star wheel, it shows how stars move across the sky through the night, and how different constellations are visible at different times of year.

The constellations of the night sky revolve around the celestial poles once every 23 hour and 56 minutes. The idea of representing the night sky as a flat map, which is turned to emulate the night sky's rotation, dated back to the ancient Greek astronomer Hipparchus (circa 150 BC). The fact that this rotation takes four minutes less than the length of a day means that stars rise four minutes earlier each day, or half-an-hour earlier each week. Through the year, new constellations become visible in the pre-dawn sky, and disappear into evening twilight.